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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,953	09/22/2005	Werner Knee	10191/3756	2859

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EXAMINER	
ABDIN, SHAHEDA A	

ART UNIT	PAPER NUMBER
2629	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/518,953	KNEE ET AL.	
	Examiner	Art Unit	
	Shaheda A. Abdin	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 September 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *12-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6 and 18-22* is/are rejected.

7)☒ Claim(s) *17* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 December 2004* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 10/17/04
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 17 is objected to because of the following informalities: Although applicant claim 17 meets the requirement of 112/2nd, i.e. the metes and bands are determinable. The terms recite in claim 17 could be improve. On line 2, before the phrase "one item" and "control data", the word "said" should be added.

On line 3, before the word "counter", the word "said' should be added and

On line 3, after the word "counter", the phrase "clock pulse" should be added.

These changes make claim read better. It is the best interest of the patent community that applicant, in his/her normal review and /or rewriting of the claims, to take into consideration these additional situation and makes changes as necessary. Appropriate correction is required.

Drawings

2. The drawings are objected to because Figs. 1 and 3 do not label the rectangular boxes as required by rule 1.83. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be

removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 12 -16, 18, 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimamoto et al. (US Patent No: 6147,672) in view of Ishibashi et al. (US Pub No: 2003/0043142).

(1) Regarding claim 12:

Simamoto in Fig.2 teaches an interface for image data transmission, comprising: at least two data lines (data lines for driver 9-10, see column 5, lines 57-67) ;

one clock pulse line (line from PLL, 8) for transmitting a clock pulse (column 6, lines 1-15).

wherein pixel data (RGB) and control data (e.g Data ENAB, VSYNC, HSYNC) are transmitted through the at least two data lines for producing an image from the pixel data (note in fig. 4A, shows waveform of outputs from the first to fifth driver 9-13 to produce color signals for the pixel), at least one item of control data (e.g.DATA ENAB, VSYNC, HSYNC) being transmitted on each of the at least two data lines (column 7, lines 1-9),

Shimamoto teaches the control pixel data but Shimamoto does not teach a correctness of pixel data transmission is checked by reference to control data transmission.

However Ishibashi in the same field of endeavor (data and control data being transmitted in the same line) teaches a correctness of pixel data transmission (e.g YUVdata) being checked by reference (at every vertical sync signal of field data) ([0058], [0061] Fig. 2 and Fig. 5).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention to incorporate the method of correctness of pixel data transmission checked by reference as taught by Ishibashi into the data transmission system of Shimamoto so that the correctness of pixel data transmission can be checked by reference to control data transmission. In this configuration the system will provide a high quality image transmission with out using a special hardware connector (Ishibashi, [0008])

(2) Regarding claim 13:

Shimamoto teaches that a selected number of pixel data and one item of control data (LP) form a data packet, and wherein data packets are transmitted in accordance with the clock pulse (SCK) (see column 6, lines 29-53) .

(3) Regarding claim 14:

Shimamoto teaches that data packet describes one pixel of an image that is to be displayed, by specifying a color value (RGB) (note that display color signal of pixel have RGB signal see Fig. 2).

(4) Regarding claim 15:

Shimamoto teaches the data packet includes six bits of pixel data and one bit of control data (column 5, lines 46-55, column 6, lines 1-15).

(5) Regarding claim 16:

Shimamoto teaches the control data includes at least one vertical (VSYNC) and one horizontal (HSYNC) image synchronization signal (column 5, lines 47-56, Fig. 2 and 3).

(6) Regarding claim 18:

Shimamoto teaches a direct voltage (e.g. first potential as CMOS/TTL level) a signa voltage (e.g. second potential). The signal voltage < the direct voltage (i.e. second potential < first potential) (see column 3, lines 17-25).

(21) Regarding claim 21:

Ishibashi teaches the item of control data (e.g. HSYNC) remains constant for a period of time that is longer than a defined threshold period of time (e.g. clock period of time, see Figs. 5A-5D).

(6) Regarding claim 20:

Note the discussion in claim 1. Claim is same as claim 1, claim 20 is a method claim and claim 1 an apparatus claim.

6. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shimamoto in view of Ishibashi as applied to claim 12 above, and further in view of Geisler (US 20010024208 A1).

(1) Regarding claim 19:

Note the discussion of Shimamoto and Ishibashi above. Shimamoto teaches the image data transmission in a display as describe in claim 12 but Shimamoto does not teach the image data transmission being performed in a motor vehicle between a driver information device and a display unit.

However, Geisler teaches the image data transmission is performed in a motor vehicle between a driver information device and a display unit ([0014] [0025-0027], [0039] fig.2).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention to incorporate a method of image data transmission performance in a motor vehicle between a driver information device and a display unit in to image data transmission system of Shimamoto so that the image data transmission can be performed in a motor vehicle between a driver information device and a display unit. In this configuration the system would have a high accuracy driver information display with out suffering a loss of quality in the compositing (Geisler, [0011]) .

7. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shimamoto in view Ishibashi as applied to claim 12 above, and further in view of Okita et al. (US Patent No: 5689513).

(1) Regarding claim 22:

Note the discussion both Shimamoto and Ishibashi does not teach switching data transmission to a backup line in an event of a detected transmission error.

However, Okita teaches switching data transmission to a backup line in an event of a detected transmission error (column 2,lines 15-27, column8, lines 55-62, fig. 7A and 7B).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention to incorporate a method of switching data transmission to a backup

line as taught by Okita into the system of Shimamoto as modified by Ishibashi so that the data transmission could be switching to a backup line in an event of a detected transmission error. In this configuration the system would have reliable and faster data transmission without loosing the information (Okita, column 8, lines 37-44).

Allowable Subject Matter

8. Claim 17 is objected to as being dependent upon a objected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's discloser.

Ikeda (US Pub: 2001/0040548 A1) discloses a LCD and Method driving same.

Inquiry

10. Any inquiry concerning this communication should be directed to the examiner at (571) 270-1673 Monday- Friday 7:30 AM to 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chanh Nguyen, can be reached at (571) 272-7772.

Information regarding the status on an application may be obtained from the Patent Application information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (tool-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9799 (IN USA OR CANADA) or 571-272-1000.

Any response to this action should be mailed to:

Commissioner of patents and trademarks

Washington, D.C. 20231

Or fax to:

(703)872-9314 (for Technology Center 2600 only)

Shaheda Abdin

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SUPERVISORY PATENT EXAMINER